Week of July 8, 2002 Vol. 3, No. 13

# GENIE users' real-time wish is granted

by William Hammelman



The GENetic Imagery Exploitation (GENIE) software tool, having been beefed-up with advanced Reconfigurable Computing hardware, is now prepared to provide real-time feature-extraction capabilities to a wide range of important applications and customers.

GENIE, a product of the Threat Reduction Directorate's Nonproliferation and International Security (NIS) Division, has undergone constant upgrade over the past two years. Working in real-time, GENIE can analyze data simultaneously from multiple imagery sources such as aerial photographs and satellite images, immediately determine infinitesimally subtle differences and assist its operator in discovering very difficult to pick out objects. "It's real-time processing at the sensor," said Reid Porter of Space and Atmospheric Sciences (NIS-3), the developer of the new hardware upgrade and a co-inventor of the original GENIE software.

The sped-up GENIE has the potential to allow search-and-rescue teams to quickly locate a downed aircraft lost in an immense mountain range, assist health experts by instantly identifying specific cancer cells among billions of healthy cells, augment security teams by recognizing specific faces in large crowds, or aid firefighters by distinguishing plumes of smoke from clouds of ash or precipitation. "The possibilities are pretty much endless," says Steven Brumby of Space and Remote Sensing Sciences (NIS-2), co-inventor of the GENIE program. "Anything that involves artificial vision could become an application."

Before the addition of the one-hundred-times faster Reconfigurable Computing hardware solution, nicknamed "POOKA," GENIE was used in such scenarios as highlighting environmental changes caused by the Cerro Grande Fire or identifying specific crops growing in a farmer's fields.

The nickname POOKA was chosen based on the use of mythological symbolism in the GENIE program. According to Porter, "Pooka is described in Irish mythology as a mischievous ghost horse and is appropriate because of the increased 'horsepower' the POOKA system provides over the GENIE software." POOKA permits the combination of GENIE with a live imagery feed, providing instant analytical capability for the observer.

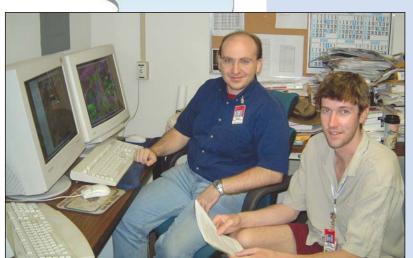
Use of POOKA adds to the price tag of an operational GENIE system. GENIE is completely software based and can therefore be loaded onto any compatible computer. The POOKA upgrade arrives in the form of a plug-in hardware board. The POOKA hardware, in its current developmental form, costs about \$20,000 per system. Though this may seem like a high price to pay for the upgrade, "It's competitive already," says Porter.

Certain applications are better suited for the processing speed provided by the hardware upgrade. POOKA is intended to analyze large amounts of data arriving at a rapid and consistent rate. Satellite imagery, as an example, primarily provides still images that are analyzed for changes over time. According to Brumby, "If you don't have to do the analysis in the field, software is better, cheaper and easier to maintain." The simple and

methodical analysis of the nonaugmented GENIE would be better suited to such an application than the overwhelming horsepower that POOKA provides.

The simplicity of the GENIE system allows it to be a highly mobile and easy-to-operate system. "Its greatest strength is replacing detailed programming of algorithms with a point-and-click interface," says Brumby. "Point-and-click programming is a big step forward in programming." The point-and-click interface of the system teamed with constantly shrinking processor sizes create the possibility that feature-extraction tools will be very wide spread in the future.

More information on GENIE and the Rapid Feature Identification Project is available at http://www.daps.lanl.gov/genie/.



Steven Brumby of Space and Remote Sensing Sciences (NIS-2), left, and Reid Porter of Space and Atmospheric Sciences (NIS-3), have developed a new and improved version of the image-analysis package, GENIE. The sped-up GENIE has the potential to allow search-and-rescue teams to quickly locate a downed aircraft lost in an immense mountain range and much more. Photo by William Hammelman.

## GENIE garners 2002 R&D 100 Award

ENetic Imagery Exploitation, or GENIE, which mimics evolution to create more effective algorithms for detecting features in digital images produced by a variety of remote-sensing techniques, has won a 2002 R&D 100 Magazine Award.

GENIE's ability to evolve superior algorithms allows it to find the features of interest in nearly any set of images.

GENIE can be used to map damage caused by natural disasters such as wildland fires, hurricanes, floods, earthquakes and volcanoes or man-made ones such as terrorist attacks. It also can monitor environmental changes, track population

growth or detect signs of disease in medical images as well as detect product defects in assembly lines, weapons and explosives at airport security checkpoints and suspect vehicles in traffic.

Now in its 40th year, R&D 100 Magazine annually recognizes the world's top 100 scientific research and technological advances with awards for innovations showing the most significant commercial potential.



According to the selection panel, "The sole criterion for making the grade is demonstrable 'technological significance' compared with competing products and technologies. Issues such as smaller size, faster speed, greater efficiency and higher environmental consciousness have continued to gain importance in successful award submissions."

### Inside this issue ...

#### Health-care costs on the rise



A University of California official recently asked Lab managers to help alert employees to upcoming changes in the Lab's healthcare plans, including the

likelihood of sharp cost increases for UC Lab employees and retirees. . . . . . Page 3

## IBM to play key role in Lab's business-improvement initiative



The Laboratory has selected IBM to serve as business systems consultants in the implementation

#### Safety and Security Day 2002



The fourth Lab-sponsored Community Safety and Security Day held last month in the Los Alamos townsite included more

## Laboratory employee runs and bicycles for the red, white and blue



Graciela Perez, ergonomics program manager for Industrial Hygiene and Safety (HSR-5), experienced the tragedy of Sept. 11, 2001, while on foreign soil representing the United States in the Duathlon World Championships in

Rimini, Italy. . . . . . . . . . . . Page 8

VewsLetter

The Los Alamos NewsLetter, the Laboratory bi-weekly publication for employees and retirees, is published by the Public Affairs Office in the Communications and External Relations (CER) Division. The staff is located in the IT Corp. Building at 135 B Central Park Square and can be reached by e-mail at newsbulletin@lanl.gov, by fax at 5-5552, by regular Lab mail at Mail Stop C177 or by calling the individual telephone numbers listed below.

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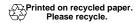
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Los Alamos National Laboratory is operated by the University of California for the National Nuclear Security Administration (NNSA) of the U.S. Department of Energy and works in partnership with NNSA's Sandia and Lawrence Livermore national laboratories to support NNSA in its mission.

Los Alamos enhances global security by ensuring safety and confidence in the U.S. nuclear stockpile, developing technologies to reduce threats from weapons of mass destruction and improving the environmental and nuclear materials legacy of the Cold War. Los Alamos' capabilities assist the nation in addressing energy, environment, infrastructure and biological security problems.





### FROM THE TOP

# Thoughts on future Los Alamos/DoD opportunities

by Nancy Ambrosiano

Steve Maaranen of the Laboratory's Threat Reduction Directorate (ADTR) policy and planning staff is taking a two-year intergovernmental personnel agreement assignment in Washington, D.C., where he will be an integral part of the Department of Defense's program to establish a "new triad" of U.S. strategic forces. His new role is as director for Forces Integration Policy, working for the Deputy Assistant Secretary of Defense for International Security Policy Keith Payne.

Maaranen, a 22-year veteran of the Laboratory, said before he left, that the DoD's new triad concept, consisting of nuclear, non-nuclear strategic weapons and missile defense, lends itself to a broader interpretation of the Laboratory's future role.

"Nuclear weapons, as a U.S. deterrent force, will merge with non-nuclear and missiledefense efforts into an integrated strategic capability, and as a result, the traditional role of nuclear weapons will change and perhaps contract over time," Maaranen said.

"This presents the opportunity for the Lab, of course, to participate more in the non-nuclear and missile-defense areas of research, as well as in the threat reduction program areas. I see these research areas taking up the slack as the nuclear work eventually plateaus. And TR's success will make a difference in how the Lab evolves over time."

### Reading the crystal ball

Science-based stockpile security eventually will level off, he predicts, following the long run of funding growth and science products. Maaranen said the Lab will need to increase its success rate at winning homeland security, missile defense and conventional weapons work to avoid a drop in the budget in the future.

"Don Cobb [associate director for threat reduction] and Doug Beason [Cobb's deputy for science and technology] are aware of this, of course, and are working to open up the really good relationships we need with Department of Defense ... it's a tough job though, to get to the point where we can think the way they think and they see us as their longtime, large-scale R&D firm partners," he said.

Building the personal relationships, better reading the crystal ball of future needs and planting ideas of potentially useful projects, is just part of the challenge. Maaranen notes that efforts have been under way to permit the Lab to be a federally funded research and development center for the DoD and other agencies, in addition to just the Department of Energy, and it is critical, he said, for that change of status to occur.

The present arrangement requires that work for agencies other than DOE come under the "Work for Others" contract, which imposes additional requirements and sets roadblocks in the way of quick, effective response to non-DOE user needs.

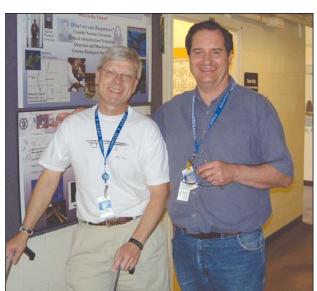
"We've done niche work for other agencies, and done pretty well, but changing the 'Work for Others' arrangement will help DoD and other homeland security work a great deal," he said. In addition, since much of the DoD's research and development work has been done in house by its own labs, or with the big defense contractors, he said, the DoD does not always appreciate the special capabilities the labs can bring to the table. The Lab has to find new ways to market itself, work its contracts and anticipate the blend of DoD user needs and possible larger-scale tasks that our program and line organizations can take on successfully.

#### How long?

The time frame for all these big national strategy changes, he noted, is probably on the 10-year scale, given the present administration's directions. Strong support for advances in strategic, non-nuclear technology will push things along, but real funding progress and advanced science needs are also emerging as missile defense looks to a higher-tech concept.

The programs of defense transformation lend themselves to a good opportunity for Los Alamos, he said. They have an advanced research and development thrust that is very different from previous requests for incremental changes in existing technology. Washington visions of the future combat vehicle; long-range strike aircraft; and real-time, global situational awareness have "a lot of cutting-edge technology requirements, more than most programs since the end of World War II," Maaranen said. "Post-WWII defense science has been evolutionary, and this is now moving by leaps."

Key, of course, to much of the new requirements is the global situational change, from a single Cold War enemy with predictable moves to a more chaotic situation. Highly adaptive, mobile systems will become essential, and they must be flexible and rely on the creation of different technology that's a generation ahead of our adversaries. "The key to being a player



in that arena is a better relationship with the R&D arms of these other agencies. Changing that relationship goes slowly, but the opportunities are probably better than they've ever been," Maaranen said.

Steve Maaranen, left, of the Laboratory's Threat Reduction Directorate (ADTR) policy and planning staff meets with Don Cobb, associate director for threat reduction, before leaving for a two-year intergovernmental personnel agreement assignment in Washington, D.C. Photo by Nancy Ambrosiano

## Health-care costs on the rise

Managers encouraged to prepare employees for expected health-care changes

by John Gustafson

A University of California official recently asked Lab managers to help alert employees to upcoming changes in the Lab's health-care plans, including the likelihood of sharp cost increases for UC Lab employees and retirees.

Bob Van Ness, UC assistant vice president for laboratory administration, said that given expected total plan increases of up to 25 percent, plan members can expect to see their costs go up two to three times that amount, or on the order of 50 to 75 percent or higher.

UC is evaluating health-plan usage and costs and developing final premium estimates for 2003 for discussion with Lab man agement and the Department of Energy. Final rates will be communicated before November's Open Enrollment.

Van Ness addressed the monthly All-managers Meeting and urged managers to encourage their employees to respond to a health-care survey to be distributed to employees' home addresses early this month.

The survey is an important part of a joint UC-Lab initiative called "Health Care: Pathways to Change." The initiative aims to identify necessary changes to continue to provide plan members quality health insurance that is affordable, both for the members and for the Lab.

Van Ness said the initiative seeks input from employees, retirees, providers and others potentially affected by changes in the Lab's

health-care plan. "The more input we have, the better represented your ideas will be in the discussions and consideration of options,

and in the eventual decisions made by UC," he said.
In addition to the survey, UC and the Lab have used focus groups to gather input and have established

a Web page through which employees can provide comments or raise general questions about health care. The internal Web page is at http://int. lanl.gov/worklife/benefits/healthmatters.shtml online and http://www.lanl.gov/worldview/welcome/health.shtml online externally.

Van Ness said such input is necessary "to help find a better set of answers. A better set — in these days — means better ways to manage and control costs.

"There's been a real spike in the cost of health care, and most employers are running out of room. Costs are being passed along to the employees," Van Ness said.

continued on Page 7



# IBM to play key role in Lab's business-improvement initiative

by James E. Rickman

The Laboratory has selected IBM to serve as business systems consultants in the implementation of a Laboratorywide business-improvement initiative.

The Laboratory selected IBM through a lengthy, competitive search for a company to provide professional services to help implement the Laboratory's Enterprise Resource Planning system — a computer-based system that will improve the way the Laboratory handles administrative functions, including finance, human resources, project management and facility management. The four-year contract with IBM is worth up to \$22 million and includes provisions for regional economic development activities.

The Laboratory began the process of implementing an ERP system in August.

Since then, the Laboratory's Enterprise Project has selected Oracle to provide the primary business systems software and previously selected IBM to provide hardware for central computing systems associated with the ERP system. As "integrator," IBM will bring significant business and technical expertise in the implementation of similar business systems, said Charlie Slocomb, leader of the Enterprise Project. IBM will co-manage the Laboratory's Enterprise Project and will work hand in hand with Laboratory personnel to ensure that Laboratory business activities are reengineered toward best business standards and that the new system is effective and responsive to Laboratory needs.

"IBM previously has completed 4,000 ERP implementations, including an implementation currently under way at the

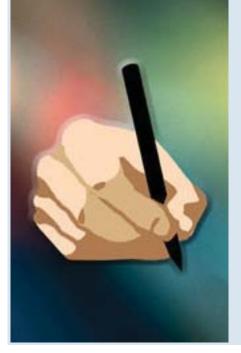
Department of Energy," Slocomb said. "We look forward to working with the talented team that IBM will provide to the Enterprise Project."

As part of the contract, IBM also brings potential economic benefits to Northern New Mexico. The company will work with the Northern New Mexico Regional Development Corp. to provide computers for use in regional economic development initiatives. IBM also will establish a fund based on 1 percent of the revenues of the contract to provide financial assistance to the Laboratory's Small Business Office — which works with regional businesses to capitalize on business opportunities with the Lab — and other organizations approved by the Regional Development Corp.

Moreover, IBM has pledged to provide at least 200 hours of technical assistance to regional small businesses to build electronic-procurement catalogs in order to give the businesses a greater chance to participate in "e-Commerce" opportunities.

"We are very pleased that IBM not only will become a partner to the Laboratory, but to the region as well," said Slocomb.

The Enterprise Project's goal is to use government and industry best business practices in conjunction with off-the-shelf business software to aid in managerial decision making, reductions in the Laboratory's cost of doing business and in increasing the Laboratory's business compatibility with DOE and other laboratories managed by the University of California. Design of the first version off the system is expected to be completed at the end of June. The financial portion of the system is scheduled to be implemented in October 2003.



# 2002 Checkpoint and Upward Appraisal surveys are out

The 2002 Checkpoint and Upward Appraisal surveys have been distributed to full-time and part-time University of California Lab employees, including regular, postdoctoral and limited-term employees. The two surveys are a forum for employees to anonymously make their opinions known to managers and Lab leaders on a range of topics. Take this opportunity to be heard. The deadline for returning surveys is July 12. For more on the survey, see the article in the June 20 Daily Newsbulletin at www.lanl.gov/newsbulletin online.

Week of July 8, 2002 Page 3 Los Alamos NewsLetter

# Safety and Security Day 2002



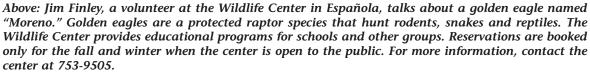
The fourth Lab-sponsored Community Safety and Security Day held last month in the Los Alamos townsite included more than 75 county, state, federal and Laboratory exhibitors. The event drew approximately 800 to 1,000 people. The annual event coincides with National Safety Month and was expanded this year to include security.

Photos by LeRoy N. Sanchez, Public Affairs Office (PAO); Mike Kolb, Community Relations Office (CRO); and Laboratory retiree Jack Clifford

Left: Bob Clark of KRSN radio station, broadcasting live from the site of Community Safety and Security Day, speaks to 4-year-old Phoebe Whittington, as her father, Jim Whittington, offers words of encouragement.

Below right: Looking for love ... Of the 10 kittens brought to the event by the Española Animal Shelter, six were adopted. The only puppy was adopted by a family of three children the next day, after they raised the \$55 adoption fee. Los Alamos residents interested in adopting a pet or becoming a Shelter volunteer may call Renee Idar of Advanced Nuclear Technology (NIS-6) at 662-2923. Contact the Española Animal Shelter at (505) 753-8662.







Right: James Lounsbury of Emergency Management and Response (S-8), far right, and, Scott Mills of the Los Alamos Police Department, near right, speak to Connie Soderberg, near left, and Cindy Wight about letter and parcel bomb recognition points during Community Safety and Security Day. Below: This Lab Emergency Management and Response (S-8) training aide is an improvised explosive device with a clockwork mechanism and two pipe bombs. It is a miniaturized replica of the explosive device that was used in Centennial Park at the Atlanta Olympics in 1996.





Los Alamos NewsLetter Page 4 Week of July 8, 2002



Jim Burns, a board member with the Family Strengths Network, describes some of the Network's parenting programs, support groups and courses designed to help parents and families in Northern New Mexico. The Family Resource Center is located in the Pueblo Complex on Diamond Drive in Los Alamos. For more information, contact the Network at 662-4515.



Maryrose Montolvo, Mark Rivera and Crestina Vigil of Nuclear Materials Technology (NMT) ATOMICS take a breather after giving away 250 water bottles bearing the ATOMICS process message, "Safety is for Life."



Gary Chavez of Materials Management (BUS-4) demonstrates how the Lab uses environmentally friendly alternatives for packaging materials. According to Chavez, a cornstarch-base "popcorn" that dissolves in water and cardboard that is shredded by BUS-4 are great packing materials.



Reptile rebuff? One young viewer doesn't appear charmed when John Charles of Weapon Materials and Manufacturing (ESA-WMM) tries to introduce her to two bull snakes, one of the more popular (and safe) New Mexico snakes. The two snakes pictured came from the area; one was caught near the Wellness Center and one in White Rock.



No pain, no gain. By their smiles, (left to right) Linda Collier of Performance Surety (PS-7), Hillard Howard of Integrated Safety Management (ISM/PO) and Phil Thullen of Health, Safety and Radiation Protection (HSR) Division appear to enjoy the ergonomic stretch exercises taught to them by Wellness Center instructor Gail Fox of Occupational Medicine (HSR-2).





Above: Lt. Ron Huerta of Protection Technology Los Alamos attracts a lot of interest at PTLA's heavy artillery display.

Left: Ryan Dunham, a 10-year old, has a good time role-playing in a Protection Technology Los Alamos Hummer. Parents and their children were allowed access to the security vehicle and provided with a photo as a memento.



## Jiron new chief of staff for associate director of administration

Albert Jiron is the new chief of staff to Rich Marquez, the Laboratory's associate director of administration.

As chief of staff to
Marquez, Jiron will
manage the framework
for the day-to-day
operations of the ADA
Directorate and
interact with the directorate leadership team



Albert Jiron

on a broad range of ADA and Laboratory initiatives.

Jiron has worked in Los Alamos 11 years, most recently as acting deputy office director of the Community Relations Office (CRO). He came to Los Alamos in 1991 as a graduate research assistant but also worked as a security inspector for Mason and Hanger Silas Mason Co., a security contract company to the Laboratory.

Jiron has worked on a variety of projects that have had significant community interest, including the Mainstreet program, a federal initiative to revitalize the Los Alamos downtown area; child care; and United Way. He also has served on numerous community organizations, including the Española Valley Chamber of Commerce; the Hispanic Statement of Cooperation; and Hands Across Cultures, an organization that promotes healthy communities.

Jiron has a bachelor's degree in political science from the University of New Mexico.

## Lab announces new scientific publication

The Laboratory is launching a new quarterly scientific publication this fall that highlights its world-class, multidisciplinary research. The four-color publication, Los Alamos Research Quarterly, is scheduled to premier in October.

The publication's editorial team includes James L. Smith of Materials Technology Metallurgy (MST-6) and Judy Prono and Chris Brigman of Communication Arts and Services (IM-1). Smith, selected by Bill Press, deputy Laboratory director for science and technology, is the scientific editor. Prono will serve as executive editor and Brigman is art director.

The editor for Philosophical Magazine since 1995, Smith is on the editorial board of Journal of Alloys and Compounds. ISIHighlyCited.com named Smith one of the most highly cited physicists in the world. ISIHighlyCited.com is an expert gateway to the most highly influential scientists and scholars worldwide. Smith has won numerous awards at the Laboratory, including the E.O. Lawrence Award from the Department of Energy. Smith primarily will be responsible for soliciting and reviewing technical content.

"My job as scientific editor will be to find the scientists who are conducting important research and help make the public more aware of their efforts," said Smith.

"The audience level is geared toward a broad, well-educated, but not necessarily technical, crowd. The publication is intended for Congress, congressional aides, University of California regents and staff, university collaborators, industry and funding and regulatory agencies," said Smith.

As executive editor, Prono is responsible for editing all the copy, managing the production schedule and dealing with production issues and overall management to make sure the publication stays on schedule. "I'm excited because this publication can help the Laboratory do a better job of communicating its accomplishments. In terms of communicating science to an influential audience, the magazine will be a challenge and meet a need," said Prono.

Brigman said, "Our aim is to create a publication that is visually compelling and useful to our readers."

For more information about Los Alamos Research Quarterly, send electronic mail to <code>jlsmith@lanl.gov</code> or <code>jprono@lanl.gov</code> online.





Chris Brigman



### Gordon to leave NNSA; will join National Security Council

Gen. John Gordon is leaving the National Nuclear Security
Administration to take a position with the National Security Council. Gordon will be deputy assistant to the president, national director and deputy national security advisor for combatting terrorism.

In a statement issued June 27, Laboratory Director John Browne said, "Gen. Gordon has been a tremendous asset to advancing the critical national security mission of the National Nuclear Security Administration and its laboratories.

"He has been extremely supportive of Los Alamos National Laboratory and our programs during the two years he has been NNSA administrator.

"His accomplishments in such a brief period have placed NNSA on solid footing and with a clear direction for the future. He is leaving a legacy of achievements in key areas including security, infrastructure renewal and NNSA's ability to address the requirements of the Nuclear Posture Review. He also has placed the laboratories on a new path for budgeting and planning that strengthens our relationship with Congress.

"I am pleased that our nation will continue to draw benefit from Gen. Gordon's leadership and expertise as a member of the National Security Council."

See the June 27 online Daily Newsbulletin at www.lanl.gov/ newsbulletin for links to a White House news release and statements by Gen. Gordon and Energy Secretary Spencer Abraham.

# News FROM DOE DOE unveils security policy reforms

The Department of Energy late last month unveiled a number of security policy reforms throughout the DOE and its laboratory complex. Energy Secretary Spencer Abraham made the announcement following the release of a report by the Center for Strategic and International Studies (CSIS) Commission of Science and Security, headed by CSIS President and Chief Executive Officer John Hamre. The panel, commissioned by the DOE to review the intersection of DOE's security, counterintelligence and science programs, conducted its work over 18 months and came up with 45 recommendations for improvements.

The DOE news release can be found at www.energy.gov/HQPress/releases02/junpr/pr02116.htm online. The Hamre report's executive summary is at www.csis.org/css/ExecSummary.pdf. John Browne's statement can be found at www.lanl.gov/orgs/pa/newsbulletin/2002/06/21/jcb\_Hamre.pdf online. Both the report's executive summary and Browne's statement require Acrobat Reader.

# Laboratory, Johnson Controls, Nambe Pueblo recycling initiative wins pollution prevention award

# Partnership provides economic boost to pueblo

by Steve Sandoval

It was serendipity." That's how Camille Bustamante of Johnson Controls Northern New Mexico described the recycling partnership between the Laboratory and Nambe Pueblo.

"It's never been economically viable for nearby communities to recycle," said Bustamante, the Lab's recycling coordinator.

Likewise, "We've never been able to recycle certain items at the Lab," she added. Not to worry. The three entities began working together on recycling in 1998, and it has been so successful that the Nambe Pueblo Recycling Facility recently received a 2002 Department of Energy Pollution Prevention Award for community outreach and education.

"It's a very competitive award," said Alicia Hale Pope of Applied Technologies (RRES-AT). "You're competing with programs from throughout the DOE complex."

Johnson Controls Northern New Mexico has a contract with the Lab's Pollution Prevention Office (RRES-PP) to collect recyclable items such as white paper and cardboard. But since last November, the Lab has been recycling plastic and aluminum and transporting them to the Nambe facility. "Glass is in the works," Bustamante added, noting that the pueblo took the initiative to make the partnership work.

Bustamante explained that personnel from JCNNM collect recycling items from designated recycling collection areas around the Laboratory. White paper and

## Health-care ...

continued from Page 3

He noted that nationally employees pay about 20 percent of the costs of their health-care plan for single coverage and about 30 percent for family coverage.

At Los Alamos, employees currently pay 14 percent of the cost of the health-care plan for single or family coverage.

As the overall costs of the Lab health-care plan go up, employees can expect to see their share of the total bill increase. UC and Lab officials do not yet have necessary information to quantify the expected increases and can only make estimates based on prevailing national trends, which are impacting all of UC and not just the Lab.

Laboratory Director John Browne, in remarks made after Van Ness' presentation, noted that when he became Lab director in 1997, the Lab's health-care plan cost about \$36 million and last year it was about \$56 million.

Van Ness distributed two handouts at the All-managers Meeting that provided information on the causes of the increase in health-care costs locally and nationally. They can be found at <a href="http://int.lanl.gov/work-life/benefits/pathways01.pdf">http://int.lanl.gov/work-life/benefits/pathways01.pdf</a> and <a href="http://int.lanl.gov/worklife/benefits/pathways02.pdf">http://int.lanl.gov/worklife/benefits/pathways02.pdf</a> online.



Bails of cardboard and sheared glue-bound material are readied for transportation to market from the Nambe Recycling Facility at Nambe Pueblo. The recycling facility recently received a 2002 Department of Energy Pollution Prevention Award for community outreach and education. The Laboratory, Johnson Controls Northern New Mexico and Nambe Pueblo began partnering on recycling in 1998. Photo by Camille Bustamante, Johnson Controls Northern New Mexico

cardboard recyclables are taken to the Lab's Materials Recycling Facility at Technical Area 60, where they are bailed for transportation to recycling centers.

Plastic, aluminum and any documents that have a glued binding are sent directly to the Nambe Recycling Facility. The facility "shears" the glue binding from the paper and recycles the paper.

Bustamante said that JCNNM assisted the pueblo in building and providing technical assistance to the Nambe Recycling Facility.

"It was the pueblo that wanted to do right by the environment," said Bustamante. "Their effort was for the right reason: to not put things in a hole in the ground."

In addition to the benefits to the Laboratory, Nambe Pueblo and the environment, the partnership also meets a federal executive order that mandates that the governmental entity, the Lab in this case, "acquaint local communities with the environmental and economic benefits of recycling and create regional markets for recycled materials."

Hale Pope said as part of the Lab's educational outreach effort, she and Bustamante have been going to schools in the Española Valley and with local, state and city officials teaching students about the virtues of recycling.

Bustamante and Mike Shepherd, economic development director for JCNNM, also coordinated a series of community meetings, and JCNNM developed and provided community support to households in the valley, touting the recycling facility and the benefits of reducing the solid-waste stream by recycling.

Longer term, Nambe Pueblo hopes to decrease by 25 percent the amount of solid waste sent to landfills and to become recognized as a leader in recycling in Northern New Mexico. The pueblo currently recycles materials from the Lab, Los Alamos County, the city of Española and businesses at Tesuque and San Ildefonso pueblos.

Employees who work at the Nambe Pueblo Recycling Facility can earn course credit toward an associate degree program in environmental science from Northern New Mexico Community College in Española, said Bustamante.

And the pueblo is working with a local group to develop an eco-industrial park to create materials-processing and energy-recovery spinoff businesses as a result of the recycling partnership.

"This was not an accident," Bustamante said of the Nambe Pueblo Recycling Facility and its ambitious goals. "This was part of of the design for the partnership."

For more information on the recycling partnership, contact Bustamante at 7-2111 or Hale Pope at 7-6711.

# Recycling coalition recognizes Laboratory

The Laboratory earlier this month received recognition from the New Mexico Recycling Coalition for its comprehensive recycling program.

The nonprofit organization lauded the Laboratory for its accomplishments in recycling, said Camille Bustamante of Johnson Controls Northern New Mexico and the Lab's recycling coordinator. The organization noted the Laboratory's fourfold increase in recycling and its waste diversion efforts.

The Department of Energy has a performance measure that requires the Lab to increase its recycling and reduce its waste generation.

The Laboratory received a framed photo made out of recycled wood pallets.

For more information, contact Bustamante at 7-2111 or write to wastenot@lanl.gov by electronic mail.

FOR YOUR BENEFIT

#### Pharmaceutical company advertising

A news item in the May 2002 issue of American Demographics notes that spending on ads by pharmaceutical companies rose from \$791 million in 1996 to \$2.5 billion in 2000. The Food and Drug Administration

relaxed rules on pharmaceutical advertising in 1997. Coincident with the increase in spending on ads was an increase in the number of prescriptions dispensed annually per person. Prescriptions rose 24 percent, from 8.7 per person in 1996 to 10.8 per person in 2000, according to the magazine.

# Lab's ergonomics program manager runs and bicycles for the red, white and blue

by Lecole Trujillo

Graciela Perez, ergonomics program manager for Industrial Hygiene and Safety (HSR-5), experienced the tragedy of Sept. 11, 2001, while on foreign soil. Perez was representing the United States in the Duathlon World Championships in Rimini, Italy, when two Italians rushed up to her and told her that America had been attacked.

The duathlon is a competition of running and bicycling: 6.2-mile run, 25 miles bicycling followed by a 3.1-mile run. Team USA sends a group of amateur athletes who qualify at the national competitions to the world championships. Perez qualified at the national races in Carlsbad, Calif. More than 1,200 athletes from around the world competed.

"There is a group of informal bicycle riders, the Pajarito Riders at the Lab, who helped me train and prepare for the duathlon. They ride everyday during their lunch hour, and I believe I qualified because of my involvement in the group," said Perez.

While on the train going to Italy, Perez was proudly wearing her Team USA outfit when the Italians rushed up to her to break the news of the attack. At first she was in disbelief. Her first instinct was to hide everything that had an American flag on it, but everything she had with her showed the flag or were in the colors red, white and blue. Americans in the United States were flaunting their patriotism, and she was trying to hide it in fear of her life. The entire U.S. team was in fear of being targets of additional attacks by terrorists.

As a result of the overwhelming fear of attack, the International Olympic Committee granted the U.S. team the option of not wearing the issued Team USA uniforms. But instead of holding on to their fear, every athlete on the U.S. team declined the offer and showed their American pride — literally on their shoulders. In addition, the U.S. competitors wore red, white and blue armbands. The only other team to show its support was Great Britain. That team wore black armbands in support of the United States.

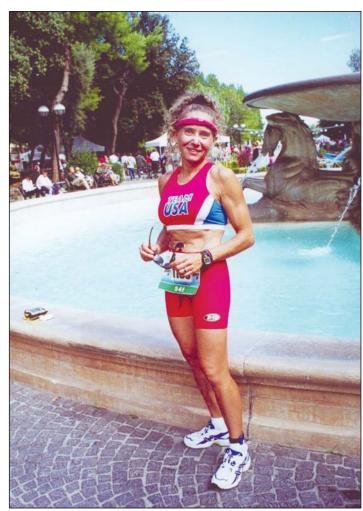
Comments from other countries varied from, "The Americans

deserved this" to "What a tragedy!" Before the attacks, the American team had encountered jealousy from other countries because the American team was the only team to travel with a full-time coach, a bike mechanic, two message therapists, a chiropractor and a medical doctor — not to mention the U.S. team had the best uniforms.

"It was the experience of being so far away from home and having to put on a brave face and be a competitor in the middle of a tragedy back home that was really tested at the duathlon, not my endurance or strength," said Perez.

She shared the experience with a group of committed athletes who had traveled more than 5,000 miles to represent America, and together they made America proud.

This year's world championships will be held in the United States on Oct. 19 and 20. The athletes who were unable to make it to the competition last year because of flights that were scheduled Sept. 11 are automatically awarded qualification to compete at the world championships this year. The final chance to qualify for the U.S. team to compete at the world championships will be July 14 in Carlsbad, Calif. This year Perez is going to forego the world championships to focus on qualifying and competing at the long-course triathlon, which will be held in Ibiza, Spain.



Graciela Perez, an ergonomics program manager for Industrial Hygiene and Safety (HSR-5), takes a photo break during the 2001 Duathlon World Championships in Rimini, Italy.



A group of women athletes cross the starting line at last year's Duathlon World Championships in Rimini, Italy. Graciela Perez, an ergonomics program manager for Industrial Hygiene and Safety (HSR-5), was among more than 1,200 athletes from around the world who competed. The duathlon is a competition of running and bicycling: 6.2-mile run, 25 miles bicycling followed by a 3.1-mile run. Photos courtesy of Perez

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